Claims

[c1]   A method for providing continuous communication between passive equipment and active equipment, comprising:

monitoring signals received from at least one of said passive equipment and active equipment, said signals relating to at least one equipment state; and

upon detecting a state change:

converting a signal associated with said state change to a TCP/IP-formatted request; and

transmitting said request to a host system.

[c2]   The method of claim 1, further comprising:

receiving said request from said host system;

removing TCP/IP formatting from said request resulting in a file transfer protocol message;

converting said file transfer protocol message to a signal; and

responding to said signal by at least one of said passive equipment and said active equipment.

[c3]   The method of claim 1, wherein said signal includes directions for executing a carrier handshake operation between said passive equipment and said active equip-

ment.

[c4] The method of claim 3, wherein said signal conforms to SEMI E84 specification.

[c5] The method of claim 1, wherein said transmitting said request to a host system further includes transmitting said request to a materials control application executing on said host system, said materials control application associated with said active equipment.

[c6] The method of claim 1, wherein said state change is indicated via pin assignments located on a connector that is coupled to said at least one of a passive equipment and an active equipment.

[c7] The method of claim 2, wherein said converting a signal associated with said state change includes:
decoding said file transfer protocol message; and
setting a signal line to a requested state.

[c8] The method of claim 1, wherein said monitoring signals includes monitoring signals for at least one load port associated with said at least one of a passive equipment and an active equipment.

[c9] A system for providing continuous communication between passive equipment and active equipment, com-

prising;

a conversion unit coupled to at least one of said passive equipment and active equipment, said conversion unit operable for:

monitoring signals received from at least one of said passive equipment and active equipment, said signals relating to at least one equipment state; and

upon detecting a state change, converting a signal associated with said state change to a TCP/IP-formatted request; and

a message handler coupled to said conversion unit, said message handler operable for:

receiving said request from said conversion unit; and

transmitting said request to a host system.

[c10] The system of claim 9, wherein said message handler is further operable for removing TCP/IP formatting from said request resulting in a file transfer protocol message.

[c11] The system of claim 10, wherein said conversion unit is further operable for:

converting said file transfer protocol message to a signal; and

responding to said signal by at least one of said passive equipment and said active equipment.

[c12] The system of claim 9, further comprising a connector

coupled to said at least one of a passive equipment and an active equipment, said connector in communication with said conversion unit; wherein said connector includes pins assignable for specifying a state change.

[c13] The system of claim 9, wherein said signals include directions for executing a carrier handshake operation.

[c14] The system of claim 13, wherein said signals conform to SEMI E84 specification.

[c15] The system of claim 9, further comprising a materials control application executing on said host system; wherein said transmitting a request to a host system includes transmitting said request to said materials control application, said materials control application associated with said active equipment.

[c16] The system of claim 9, wherein said TCP/IP-formatted request includes an Internet Protocol header operable for specifying an address of at least one load port associated with said at least one of a passive equipment and an active equipment.

[c17] The system of claim 9, further comprising a network; wherein said host system receives said request from said message handler via said network.

[c18] The system of claim 17 wherein said network is a local area network.

[c19] The system of claim 17, wherein said network is a wireless local area network.

[c20] A storage medium encoded with machine-readable computer program code for providing continuous communication between passive equipment and active equipment, said program code including instructions for causing a conversion system to implement a method, comprising:
monitoring signals received from at least one of said passive equipment and active equipment, said signals relating to at least one equipment state; and
upon detecting a state change:
converting a signal associated with said state change to a TCP/IP-formatted request; and
transmitting said request to a host system.